



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,205	12/07/2000	Masahito Niikawa	15162/02810	9462

24367 7590 02/24/2005

SIDLEY AUSTIN BROWN & WOOD LLP
717 NORTH HARWOOD
SUITE 3400
DALLAS, TX 75201

EXAMINER

HENN, TIMOTHY J

ART UNIT	PAPER NUMBER
----------	--------------

2612

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/732,205	Applicant(s) NIIKAWA, MASAHIITO	
	Examiner Timothy J Henn	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12 October 2004 have been fully considered but they are not persuasive.

As the applicant recognizes, Kazami teaches displaying an image when an electronic zoom is performed (i.e. activates the electronic finder), but does not disclose enabling the electronic finder if it is in a disabled state (i.e. forcedly activating the electronic finder). Kazami further teaches that the use of the electronic finder is required when the electronic zoom is performed in order to verify the image to be taken due to the fact that the optical finder image and the electronically zoomed image do not match (c. 4, l. 63 - c. 5, l. 11).

Hiroki teaches turning necessary portions of a camera on and off depending on a current mode of the camera. When this teaching is combined with Kazami, it would be obvious to turn the electronic finder to an on state regardless of its previous state when the camera enters an electronic zoom state (i.e. performing an electronic zoom process) since the electronic finder is necessary to verify the image being taken. Kazami further discloses that functions not required for a current state can be manually turned on or off by the user thereby resulting in simple manipulation and permitting saving of power consumption (c. 2, ll. 63-68).

Applicant further argues that Hiroki only teaches turning on or off portions of the electronic camera in response to a user actively changing the operating configuration of the camera and does not turn any features on or off depending on whether or not a

Art Unit: 2612

process is performed. However, Kazami teaches changing the camera to a different state (i.e. operating configuration) by activating an electronic zoom (e.g. Figure 2, Item 21). This action triggers an electronic zoom process and based on the teaching of Hiroki will forcedly activate an electronic finder at the same time that the electronic zoom process of Kazami is being performed.

The applicant further argues in response to claim 5 that neither Kazami nor Hiroki teach the forced activation of the EVF when some capability of the video camera is exceeded. However, since Kazami does not change the optical viewfinder's zoom factor according to changes in the electronic zoom, whenever the electronic zoom is activated in Kazami the optical finder's magnification range (i.e. the current portion of the scene viewable or the current focal length of the optical viewfinder) will be exceeded (i.e. the effective magnification will not equal the magnification of the optical finder), and therefore the electronic finder will necessarily be turned on according to the teachings of Hiroki.

Regarding the applicants arguments for claims 9 and 10, the examiner notes that since Kazami does not change the optical viewfinder's zoom factor according to changes in the electronic zoom, whenever the electronic zoom is activated in Kazami the optical finder's magnification range (i.e. the current portion of the scene viewable or the current focal length of the optical viewfinder) will be exceeded (i.e. the effective magnification will not equal the magnification of the optical finder), and a warning light will be displayed in the optical viewfinder as taught by Kazami.

The limitation of "magnification range" can be interpreted as the current range of the scene which is magnified (i.e. viewable) which corresponds to a certain focal length such that if the image displayed in the optical finder and the image produced by the electronic zoom process do not match, they can be said to have different magnification ranges. As written, the claims do not require an effective magnification of the optical and electronic zoom to be compared with all possible magnification or zoom ratios which the optical viewfinder is capable of producing. However, if the claims were amended to clearly state that exceeding the magnification range corresponds to exceeding the maximum or minimum possible zoom ratio of the camera, then Kazami in view of Hiroki would no longer be readable on the claims.

The examiner further notes that the claims as written are apparatus claims and reminds the applicant that apparatus claims must be distinguishable from the prior art in terms of structure rather than function (see MPEP §2114).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazami (US 6,289,178) in view of Hiroki et al. (US 4,945,424).

[claim 1]

In regard to claim 1, note that Kazami discloses a digital camera (Figure 2) comprising: an optical finder for optically viewing a photographic object (Figure 2, Item 22); an electronic finder for electronically displaying a photographic object (Figure 2, Item 15); an operation member for performing an electronic zoom (Figure 2, Item 21); and a controller for setting the electronic finder to the activated state (i.e. displaying an image) when the electronic zoom is performed by the operation member (e.g. Figure 3, Item S7). Therefore it can be seen that Kazami lacks a switching member for switching between an activated state and a deactivated state of the electronic finder and a controller which forcedly sets the electronic finder to the activated state (i.e. turning the electronic finder to an on state if it was previously off) when the electronic zoom is performed.

Hiroki et al. teaches a camera which saves power by automatically turning on only the devices which are required for a given mode and turns off the devices which are not required for that mode (e.g. Column 2, Lines 48-68). It is also noted that Kazami teaches that the use of the electronic finder is required when the electronic zoom is performed to verify the image to be taken due to the fact that the optical finder image and the electronic zoomed image do not match (e.g. Column 4, Line 63 - Column 5, Line 11). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teachings of Hiroki et al. to the camera of Kazami in order to activate the required electronic display when the electronic zoom mode is activated and deactivate the electronic display when the electronic zoom mode is not activated in order to conserve power.

Art Unit: 2612

[claim 2]

In regard to claim 2, note that Kazami further discloses an indicator for indicating a warning when electronic zoom is performed (Figure 2, Item 18; Column 4, Lines 63-67).

[claim 3]

In regard to claim 3, note that Kazami discloses the positioning of the indicator that is viewable when the photographer is looking in the optical finder (Column 5, Lines 28-37).

[claim 4]

In regard to claim 4, note that Kazami discloses an indicator that indicates a warning when an effective magnification of the electronic zoom exceeds a magnification range of the optical finder (Figure 2, Item 18; Column 4, Lines 63-67; The office notes that when the viewfinder zoom is set at a magnification range (i.e. a certain focal length) and the electronic zoom is activated, the product of the electronic zoom and the optical zoom will exceed the magnification of the view finder and a warning will be issued. It is noted that whenever the electronic zoom is activated it will inherently exceed the magnification range of the optical viewfinder in such a system as described by Kazami).

[claim 5]

In regard to claim 5, note that Kazami discloses a digital camera (Figure 2) comprising: an optical finder for optically viewing a photographic object (Figure 2, Item 22); an electronic finder for electronically displaying a photographic object (Figure 2, Item 15); an operation member for performing an electronic zoom (Figure 2, Item 21);

Art Unit: 2612

and a zooming lens for image sensing (Figure 1, Item 13; Column 3, Lines 37-41).

Therefore, it can be seen that Kazami lacks a switching member for switching between an activated and a deactivated state of the electronic finder and a controller for setting the electronic finder to the activated state when an effective magnification of the electronic zoom exceeds a magnification range of the optical finder.

Hiroki et al. teaches a camera which saves power by automatically turning on only the devices which are required for a given mode and turns off the devices which are not required for that mode (e.g. Column 2, Lines 48-68). It is also noted that Kazami teaches that the use of the electronic finder is required when the electronic zoom (i.e. when the zoom range of the electronic zoom exceeds the zoom range of the optical finder; The office notes that when the viewfinder zoom is set at a magnification range (i.e. a certain focal length) and the electronic zoom is activated, the product of the electronic zoom and the optical zoom will exceed the magnification of the view finder and a warning will be issued. It is noted that whenever the electronic zoom is activated it will inherently exceed the magnification range of the optical viewfinder in such a system as described by Kazami) is performed to verify the image to be taken due to the fact that the optical finder image and the electronic zoomed image do not match (e.g. Column 4, Line 63 - Column 5, Line 11). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teachings of Hiroki et al. to the camera of Kazami in order to activate the required electronic display when the electronic zoom mode is activated and deactivate the electronic display when

the electronic zoom mode is not activated in order to conserve power.

[claim 11]

Claim 11 is a computer implemented method claim corresponding to apparatus claim 1. Therefore, claim 11 is analyzed and rejected as previously discussed with respect to claim 1.

4. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazami (US 6,289,178) in view of Hiroki et al. (US 4,945,424) in further view of Ushiro et al. (US 5,144,491).

[claim 7]

In regard to claim 7, note that Kazami discloses a digital camera (Figure 2) comprising: an optical finder for optically viewing a photographic object (Figure 2, Item 22); an electronic finder for electronically displaying a photographic object (Figure 2, Item 15); and an operation member for performing an electronic zoom (Figure 2, Item 21).

Therefore, it can be seen that Kazami lacks a switching member for switching between an activated and a deactivated state of the electronic finder and a controller for setting the electronic finder to the activated state when an effective magnification of the exceeds a magnification range of the optical finder.

Hiroki et al. teaches a camera which saves power by automatically turning on only the devices which are required for a given mode and turns off the devices which are not required for that mode (e.g. Column 2, Lines 48-68). It is also noted that Kazami teaches that the use of the electronic finder is required when the electronic

Art Unit: 2612

zoom (i.e. when the zoom range of the electronic zoom exceeds the zoom range of the optical finder; The office notes that when the viewfinder zoom is set at a magnification range (i.e. a certain focal length) and the electronic zoom is activated, the product of the electronic zoom and the optical zoom will exceed the magnification of the view finder and a warning will be issued. It is noted that whenever the electronic zoom is activated it will inherently exceed the magnification range of the optical viewfinder in such a system as described by Kazami) is performed to verify the image to be taken due to the fact that the optical finder image and the electronic zoomed image do not match (e.g. Column 4, Line 63 - Column 5, Line 11). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teachings of Hiroki et al. to the camera of Kazami in order to activate the required electronic display when the electronic zoom mode is activated and deactivate the electronic display when the electronic zoom mode is not activated in order to conserve power. It can further be seen that Kazami in view of Hiroki et al. lacks a setter for setting a magnification for image sensing when the digital camera is activated.

Ushiro et al. discloses a system which stores a position of a zoom lens prior to powering off the camera and sets the zoom lens at the stored position when the camera (e.g. Figure 10; Column 12, Line 66 - Column 14, Line 15). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a setter as taught by Ushiro et al. to drive the zoom lens to the same position it was at prior to powering off the camera.

[claim 8]

In regard to claim 8, note that Ushiro et al. discloses a memory for storing a magnification for image sensing when the camera is powered off, and the setter is set to magnification stored in the memory (Figure 9, Item 425; Column 12, Line 66 - Column 14, Line 15).

5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazami (US 6,289,178) in view Ushiro et al. (US 5,144,491).

[claim 9]

In regard to claim 9, note that Kazami discloses a digital camera (Figure 2) comprising: an optical finder for optically viewing a photographic object (Figure 2, Item 22); an electronic finder for electronically displaying a photographic object (Figure 2, Item 15); an operation member for performing an electronic zoom (Figure 2, Item 21); and an indicator for indicating a warning when the magnification is outside a magnification range of the optical finder (Figure 2, Item 18; Column 4, Lines 63-67; The office notes that when the viewfinder zoom is set at a magnification range (i.e. a certain focal length) and the electronic zoom is activated, the product of the electronic zoom and the optical zoom will exceed the magnification of the view finder and a warning will be issued. It is noted that whenever the electronic zoom is activated it will inherently exceed the magnification range of the optical viewfinder in such a system as described by Kazami). Therefore, it can be seen that Kazami lacks a setter for setting a magnification for image sensing when the digital camera is activated.

Ushiro et al. discloses a system which stores a position of a zoom lens prior to powering off the camera and sets the zoom lens at the stored position when the camera (e.g. Figure 10; Column 12, Line 66 - Column 14, Line 15). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a setter as taught by Ushiro et al. to drive the zoom lens to the same position it was at prior to powering off the camera.

[claim 10]

In regard to claim 10, note that Ushiro et al. discloses a memory for storing a magnification for image sensing when the camera is powered off, and the setter is set to magnification stored in the memory (Figure 9, Item 425; Column 12, Line 66 - Column 14, Line 15).

Allowable Subject Matter

6. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

[claim 6]

In regard to claim 6, the prior art fails to teach or reasonably suggest a controller that maintains the state of the electronic finder even when the effective magnification is changed to within the magnification range of the optical viewfinder.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

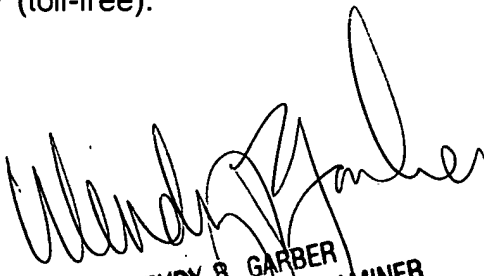
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Henn whose telephone number is (703) 305-8327. The examiner can normally be reached on M-F 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJH
2/9/2005



WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600